

Title: Linking Toy

This application claims the benefit of Provisional Application Serial No.: 60/434,877 filed December 19, 2002.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to a toy and more specifically to a children's linking toy or plaything comprising a selectively separable loop structure which can be played with and enjoyed by itself or in combination with other such loop members. This invention also relates to a children's toy comprised of a combination or set of such loop members.

2. Description of the Prior Art

A variety of loop type structures exists as playthings or toys for children. Circular, closed loops constructed of plastic are available in a variety of toys. Loops are also available which are constructed of plastic, include a pair of ends defining a loop opening and are somewhat flexible so that the loop ends can be temporarily separated from one another to hook onto another loop or another object. When released, the loop ends return to their normal closed loop form as a result of the spring or flexible nature of the plastic material.

Although a variety of loop type structures exist in the prior art, there is a continuing need for new structures which offer advantages over those existing in the art.

SUMMARY OF THE INVENTION

The present invention relates to a linking loop-type structure which, in its preferred embodiment, either individually or in combination with other such loop structures, forms a child's toy or plaything.

The loop structure of the present invention comprises a loop structure with a separation which can be manually separated to position the loop onto a desired structure or onto another loop and which includes means to automatically and securely return the separated portions to a connected position in which the loop forms a closed loop structure.

In the present invention, the loop structure comprises an elongated tubular member formed in the shape of a closed loop. The structure includes a pair of free ends which in their non-stressed or non-separated position are closely adjacent to one another. In the preferred embodiment, the invention includes a magnet or other similar attracting means in each of the free ends so that when the ends are closely adjacent to one another, and are not manually separated, the respective free ends will attract to one another and form a closed loop structure with the free ends being attracted to one another to secure the closed loop.

Although the preferred embodiment of the structure of the present invention is constructed of a fabric material which is stuffed with natural or synthetic material, the loop structure can be constructed of a variety of materials.

Accordingly, it is an object of the present invention to provide a separated loop type structure in which the loop ends are attracted to one another and are capable of manual separation.

Another object of the present invention is to provide a loop type toy structure constructed of fabric which is shaped in the form of a loop.

A still further object of the present invention is to provide a tubular member having magnets at each end so that the member can be formed into a loop type structure.

These and other objects of the present invention will become apparent with reference to the drawings, the description of the preferred embodiment and the appended claims.

DESCRIPTION OF THE DRAWINGS

Figure 1 is an isometric view of the toy of the present invention.

Figure 2 is an elevational front view of the toy loop of the present invention in which the loop ends have been manually separated.

Figure 3 is a fragmentary elevational top view of the toy loop structure of the present invention with the loop ends being manually separated.

Figure 4 is a view, partially in section as viewed along the section line 4-4 of Figure 3.

Figure 5 is an isometric view showing one of the magnets and the magnet retaining sack.

Figure 6 is an isometric view of a toy structure comprised of a plurality or set of individual loop structures of the present invention.

Figure 7 is an elevational front view of a further configuration of a loop structure in accordance with the present invention.

Figure 8 is an elevational front view of a further configuration of a loop structure in accordance with the present invention.

Figure 9 is an elevational side view of a further configuration of a structure in accordance with the present invention.

Figure 10 is an isometric view of a further embodiment of a loop structure in accordance with the present invention.

Figure 11 is an isometric view of a toy in accordance with the present invention showing a plurality of the loop structures in combination with a loop keeper.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to the drawings, the linking loop type toy accessory or toy structure of the present invention in its preferred embodiment comprises an elongated tubular member 11 which is bent or formed into the shape of a closed loop. As shown in each of Figures 1-4, the tubular member 11 includes a pair of opposite free ends 12 and 14 which are adjacent or closely adjacent to one another. Each of the ends 12 and 14 is provided with magnetic means in the form of either a magnet or a material attracted to a magnet. In the preferred embodiment, as shown best in Figure 4, the end 12 is provided with a magnet 15 and the end 14 is provided with a magnet 16. In the configuration shown in Figure 4, the magnets 15 and 16 are generally disc-shaped magnets with one face having a first or north polarity and the opposite face having an attracting second or south polarity. The magnets 15 and 16 are oriented within the ends 12 and 14 so that opposite poles of the magnets 15 and 16 are adjacent to one another. This results in the magnets 15 and 16 and thus their respective free ends 12 and 14 being attracted to one another when the two ends 12 and 14 are brought close together or are in relatively close proximity to one another.

Although the preferred embodiment discloses a magnet 15 and 16 in each of the ends 12 and 14, one of the magnets could be replaced by a material such as an iron based material which is attracted to a magnet. Further, although the preferred structure shows the magnets 15 and 16 as being generally disc shaped, they can be of any configuration.

Although the magnets 15 and 16 can, if desired, be secured directly to the outer surface of the free ends 12 and 14, it is preferred that the magnets 15 and 16 be retained at the ends 12 and

14 via a layer of fabric 18,19. This fabric provides a more esthetic structure and also functions to capture the magnet and to prevent it from being accessed by the user of the structure.

To further assure that the magnets 15 and 16 are not capable of being accessed by the child or user of the toy structure, each magnet 15,16 is preferably captured within a separate magnet-retaining sack 20,21 as shown best in Figure 5. In Figure 5, the magnet-retaining sack 20,21 is constructed of a mesh material which fully captures its respective magnet 15,16. In the preferred embodiment, the sack 20,21 is then sewn shut to fully capture the magnet 15,16 and the sack 20,21 is then sewn directly to the fabric portion of the tubular member 11. This prevents the magnets 15,16 from being lost or from being removed or otherwise accessed by the child or user of the toy.

In the preferred embodiment, the tubular member is formed into the shape of a loop type structure as shown best in Figure 1 and 2. The tubular member 11 has a tubular outer fabric or cloth layer which is stuffed with natural or synthetic material. The tubular member 11 is sewn and constructed so that in its unstressed position, it forms a generally loop type structure in which the ends 12 and 14 are closely adjacent to or in fact touching one another. When sewn, the tubular structure includes a seam 22 around the exterior periphery of the loop structure and a seam 24 around the interior periphery of the loop type structure. The end caps 18 and 19 are sewn to the outer fabric of the tubular member 11 via the seams 25 and 26.

Preferably, the material from which the tubular member 11 is formed is a relatively flexible member having some memory. Thus, if it is stressed, it will tend to reform its original shape. Any tubular member such as the stuffed tubular fabric as shown and described in the preferred embodiment as well as structures which are comprised of solid plastic or hollow plastic materials can be used. The fabric material of the preferred embodiment can also be replaced with a synthetic or plastic material.

Figure 6 shows a toy constructed of a plurality of loop type structures of the present invention. With this toy, a child can manually separate the loops to remove them from one another and connect them with other objects or can connect them to one another in various configurations.

Figures 7 and 8 illustrate other embodiments of the tubular loop member such as a triangular configuration as shown in Figure 7 and a rectangular or square configuration shown in Figure 8. Figure 9 illustrates a further embodiment of the present invention which is comprised

of an elongated, flexible tubular member 28 having opposite free ends 29 and 30. This embodiment is not generally formed into a loop-type structure in its unstressed position. It does, however, include a magnet or magnetic material in each of its ends 29 and 30. Thus, the elongated structure of Figure 9 can be formed into the shape of a loop so that its ends 29 and 30 are closely adjacent to one another. When this occurs, the magnets in those ends 29,30 will attract to one another and will retain the ends in that connected position and the tubular member in the loop type configuration. The structure of Figure 9 can also be connected end to end with one or more similar structures to produce a still longer structure.

Figure 10 is a further embodiment in accordance with the present invention. The embodiment of Figure 10 includes a loop-type structure 35 similar to the loop structure shown in Figures 1-9. This loop structure 35 includes a pair of ends 36 and 38 with attracting magnets embedded therein. Connected at one of the ends 36 and 38 is an object 39 such as an animal head, an insect or bug head or the like. This object 39 is preferably constructed of a fabric or other material such as plastic or the like and is sewn into or otherwise connected to the loop 35 near one of the ends 36 and 38.

Figure 11 shows a toy structure embodying one or more of the loop structures shown and described in Figures 1-10. The toy of Figure 11 includes a keeper 43. In the preferred embodiment, the keeper 43 displays a configuration in the form of an insect, animal or other identifiable object and includes a central body portion 40 and a plurality of closed loop structures in the form of keeper loops 42 extending from the body 40. More specifically, as shown, each of the keeper loops 42 includes a pair of ends which are preferably fixed to the body 40 by stitching or the like so they are not removable or otherwise separable from the body 40. The body portion 40 is preferably constructed of a stuffed fabric, while the keeper loops 42 are plastic.

The toy of Figure 11 also includes one or more (preferably at least two) loop structures 44 which are similar to the loop structures shown and described in Figures 1-10. If desired, a head or other portion 41 can be joined to the body portion 40 as shown. Although the loops 42 which are connected to the body are closed loops which are not intended to be separated, they can, if desired, be constructed similar to the loop structures of Figures 1-10 in which a portion is manually separable from one another. The toy of Figure 11 is usable by a child by connecting and disconnecting the plurality of loops 44 from the loops 42 of the keeper 43.

Although the description of the preferred embodiment has been quite specific, it is contemplated that various modifications could be made without deviating from the spirit of the present invention. Accordingly, it is intended that the scope of the present invention be dictated by the appended claims rather than by the description of the preferred embodiment.